

CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society
Of America

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No. 2



FIG. 13. A "button garden" arranged by
Florence Waye Casebolt.



CACTUS AND SUCCULENT JOURNAL

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A NEW BOOKLET

"Button Gardens and How to Make Them" is the title of a 24-page booklet by Florence Waye Casebolt. Miniature arrangements on buttons are becoming very popular especially for the cactophile whose plants are well adapted for this purpose. It is surprising how these gardens survive and the small colorful cuttings are never missed from your collection. Order a booklet and then test your originality. Order from Abbey Garden Press, price 50c postpaid.

(See pg. 17)

MORE HAWORTHIAS WANTED

Dr. Clara Clevenger and I have been yearning for a book on Haworthias as we are very intent on collecting these plants. I have 40 kinds now with orders out for others. We get together and go through all our cacti and succulent material, listing and making notes about them. We especially prize pictures from catalogs. We are humbly requesting that J. R. Brown or some other person qualified, be stirred up to produce a book about them alone with plenty of pictures and to put us at the front end of the waiting line.

I believe that cactus clubs in this part of the country will remain few in number and small in membership for experience so far has shown that unless one has a greenhouse, a very large number of plants are not practical. One may do fairly well in the winter but it is the summer that is the trouble. Rainfall and weather are not suitable for cactus culture and it is late in the spring (June, and this year mid-July) before cacti can be set in the ground.

To popularize succulents we would need to feature small-growing plants that tolerate summer in the house or on a protected porch. Haworthias and some of the smaller Aloes and others answer pretty well to this need.

This is rather a back handed way of saying that so many people have been disillusioned by advertising plants suitable for California that I am afraid the breeze from the cactus fans is

rapidly dying down. Unless those more practically suited for house culture the year around are featured in catalog and magazine articles, we are sunk. I speak from the experience I have had in trying to interest former members and prospects in reviving our Cactus Club here. Few people can achieve a greenhouse and not too many can devote the room to a collection of most kinds of cacti. I think the book on Mammillarias is a step in the right direction. Plenty of specific material on small-growing types would encourage study of the printed material and the plants themselves. That is what we want to do with Haworthias.

MRS. L. A. PHILLIPS,

IMPORTANT NOTICE

We are glad to announce that "Succulent Plants" and the 140 three-dimension slides with viewer have just been received and the orders on file will be shipped immediately. See page 162 of the December JOURNAL for complete information about this newest addition to the study of cacti and succulents. The price is \$11.50 plus sales tax on California sales.

We hope to announce in March that the JOURNALS for last year may be sent in for binding. We have 200 cases made and are waiting for a schedule from the book-binder. We do not want to have the same delay that we had last year.

The Epiphyllum book is on the press and we expect to announce the delivery date soon. Orders on file will be filled as soon as the book is completed.

The February issue of Sunset Magazine has an excellent three page article on Epiphyllums and their culture by Mrs. Cactus Pete. We can obtain this for you while available at 35c.

Peniocereus Fosterianus sp. nov.

A NEW, UNIQUE SPECIES FROM OLD MEXICO

By LADISLAUS CUTAK

Missouri Botanical Garden

In the State of Guerrero, Mexico, there grows a very unique and perplexing cactus which has been under my observation for the past two years. I say 'perplexing' because its adult stems are terete, about the thickness of a pencil, while the young shoots which develop on them are at first angled or winged and so unlike that it is difficult to realize they are one and the same plant. These 3- to 5-ribbed juvenile growths, when taken off and rooted, will produce tubers in the first or second year. That the plant is a *Peniocereus* is certain, for it possesses a typical fleshy turnip-shaped root and the closely set areoles on the primary stems and young branches, filled with short slender spines, are characteristic of that genus; but it cannot be matched closely with any species, except perhaps with

P. Rosei Ortega, native to the State of Sinaloa. So far, I have not had the opportunity to study living material of this Sinaloan cylindric-stemmed endemic and know it only through the original description and illustration in *Revista Mexicana de Biología* (4:189-191, 1926), but I was informed by my good friend, Mr. Wm. Taylor Marshall, that *P. Rosei* in mature stems resembles *Monvillea Spegazzinii* (Weber) Br. & R., and in young growth shows the white blotches very strongly as mentioned by Señor Ortega in his original description. Our new cactus is principally distinguished from it by the absence of a scale in the areoles, by the absence of the conspicuous blotches on the stems, by having more spines in the young areoles and by several other minor features.

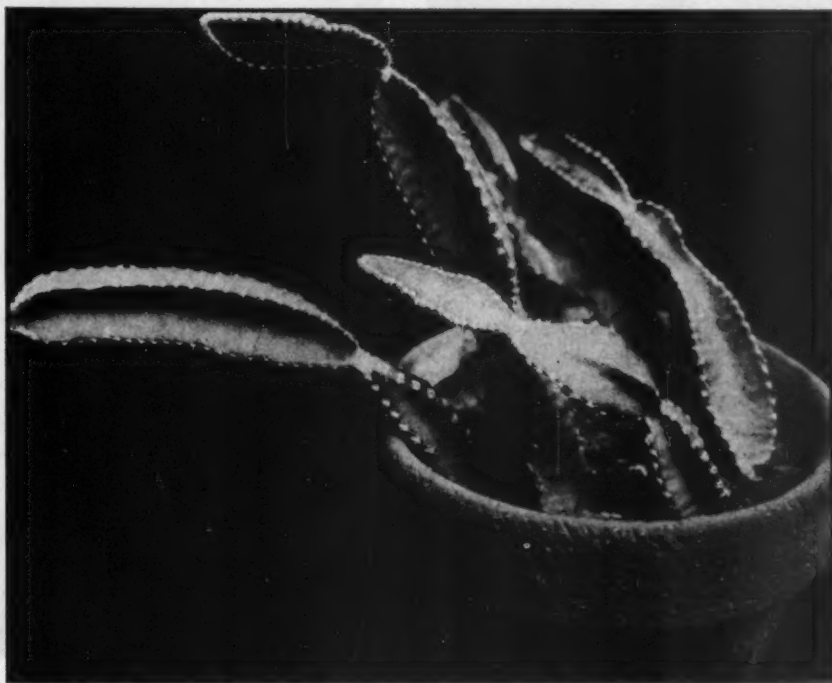


FIG. 14. Close-up of winged young shoots of *Peniocereus Fosterianus* in rooting pot.



FIG. 15. Five-year-old plants of *Peniocereus Fosterianus*.

In some respects, especially when referring to the young angled joints, this new cactus may suggest relationship with *Cereus* (*Acanthocereus*) *maculatus* Weingart, which also hails from almost identical locality, but again there are differences to distinguish it. Through Mr. Marshall I was fortunate to get a check plant of the latter from the nursery of Mr. R. W. Kelly. This plant is conspicuously 3-angled throughout, generously blotched or spotted (from which character it received its specific name) and curiously develops a carrot-like tuberous root. From the fact that Friederich Ritter (who sent cuttings to Wilhelm Weingart for identification in 1932) failed to mention anything about the enlarged root and further because Weingart's description of *Cereus maculatus* is so vague proves neither of them knew very much about the plant in general. You may be interested to learn that Weingart described his species (*Kakteenkunde*, 1933, p. 14) from juvenile cuttings and he did

not know the mature form and had only fragmentary dried flower material to go by. Tentatively he suggested that it might be an *Acanthocereus*, basing his verdict on the winged appearance of the juvenile stems. However, it now appears that the plant is a true *Peniocereus* and apparently will be transferred into that genus when the first flowers on cultivated specimens manifest themselves to insure its valid position.

The new cactus, which I am naming *Peniocereus Fosterianus*, is a rather distinct species and honors Mr. Mulford B. Foster of Orlando, Florida, who discovered the plant in 1935. This enthusiastic cactus collector, now better known for his Bromel hunts in Brazil, made his first collecting trip to Mexico for cacti in that year and later made two additional excursions, each time bringing back material of every description. In his Orlando garden he has grown these unique desert plants for many years and it is



FIG. 16. New growth appearing on adult stem of *Peniocereus Fosterianus*.



FIG. 17. Young shoots taken from adult stems of *Peniocereus Fosterianus* produce tuberous roots in first year.

there that I first espied this puzzling cactus in 1944. It is there growing under a palm in partial shade and has been outside at least six or seven years with no special protection and has never been injured by frost. The plant's development is quite the same as where he found it in Mexico and at no time has the winged section of the plant continued without becoming terete, excepting with the small rooted offshoots. At the time of my visit I could not satisfactorily place it in any particular category and therefore was curious to find out what it was. A portion of the stem was cut off, despatched to St. Louis and rooted. After the cutting became established, young shoots began to appear near the top of the terete stem and bore no resemblance whatsoever to the parent, but immediately suggested to me affinity with the genus *Peniocereus*. A cursory examination revealed that it could not be matched with any of the species, so after a thorough search of current literature, which failed to disclose that it might be duplicated, it was then decided to publish it as new.

Mr. Foster came upon this odd, straggly plant in rather dense short growth of small shrubs where it likes to grow for its support. Apparently the species is not plentiful, judging from the fact that the region is fairly accessible to botanists, and has not been collected previously.

Up to the present it is not known to occur outside of Guerrero, where it grows in a restricted area. It was discovered about two miles south of the village of Tierra Colorada, at an elevation of about 1500 ft. above sea level, on the Mexico City-Acapulco highway, or approximately 50 miles north of the ancient Pacific seaport. I have visited the same locality in 1939 but did not come upon anything unusual in the plant line there as my collecting was somewhat restricted.

The following detailed description is made from plants grown in Foster's outdoor collection and also at the Missouri Botanical Garden. For the Latin diagnosis I am greatly indebted to Dr. Leon Croizat of the Arnold Arboretum.

Peniocereus Fosterianus Cutak, n. sp.: Plants sparingly bushy, up to 7 ft. high, with more or less elongated, branching, cylindrical, slender stems arising from a short terete or angled woody trunk. Root fleshy and tuberous, at first more or less carrot-shaped and later globose to globose conic, Cream Buff to Tawny Olive (*) (light brown) in color, approximately $2\frac{1}{2}$ to 4 inches (6 to 10 cm.) in diameter in 5 to 10 year old specimens. Primary stem short, usually 3 to 5 angled, often becoming terete and woody with age. Adult stems definitely terete, slender, glabrous, Parrot Green (light green) throughout

(*) Color terms according to Ridgeway's Color Standards and Nomenclature.

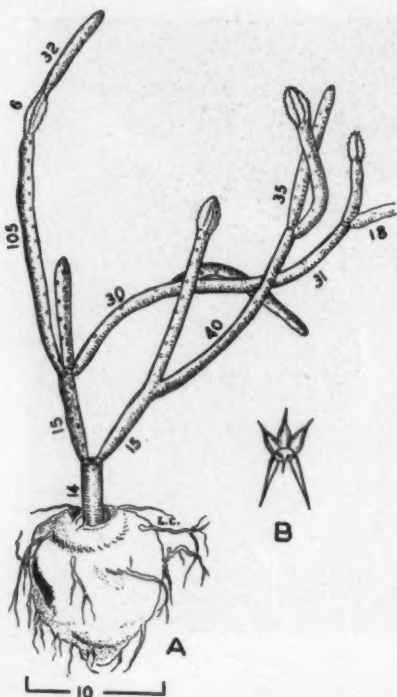


FIG. 18. Rough sketch of *Peniocereus Fosterianus* growing in Foster's garden. Figures represent relative length of joints in centimeters. B. Spine cluster from adult stem. Illustrations not drawn to scale.

or much lighter in the apical portion where more or less purple tinted, variable as to length, 4 to 42 inches (10 to 105 cm.) long, 8 to 10 mm. in diameter. Areoles very small, practically naked, 1.5 to 2 cm. apart, bearing usually 6 short spines, five appearing radial and one supposedly central. The upper 2 or 3 radials and the solitary central are characteristically bulbous to conic, usually dark brown to blackish, somewhat appressed except the central which is porrect or perhaps slightly retrorse, 1 mm. long. The 2 lower radials are acicular, only slightly bulbous at base, of the same color or rarely light brown transparent, 2 to 3 mm. long. The spine armament is therefore very inconspicuous and hardly perceptible to the naked eye. The new shoots break through the upper end of the tiny areoles at or near the tips of the terete branches; first a small inconspicuous tuft of white hairs emerges, shortly after a knoblike, brownish green body appears with white wool and glassy white spines in the areoles. The areoles are very small, circular in outline, closely set, 1 to 1.5 mm. apart. The angles or ribs are at first indistinct, but as the shoot grows the ribs become more pro-

nounced, usually 3, 4 or 5 in number. The young shoots sometimes produce roots while still attached to the mother stem and when taken off, placed in sandy soil will develop tubers in the first or second year. On the other hand, the new growth which develops at the tips of the terete branches likewise is angled or winged, but it becomes terete after attaining 2 or 3 inches in length. It then tapers off abruptly and by the time the joint makes its full growth, the winged start is hardly discerned. The young shoots are 3 to 6 cm. long, Spinach Green (dark green) in color, and often purple tinted, especially along the rib margins, the whole surface minutely and densely white flecked (not blotched). The new spines are bristle-like, spreading, 6 to 8 in number, of nearly equal length, 2 to 3 mm. long, glassy white in the apical areoles but turning Honey Yellow to Tawny (yellowish to amber brown) down the ribs. Flowers nocturnal, white, 8.5 to 10 cm. long, making their appearance in early June. Flower-tube and throat about 5 cm. long, the former about 1 cm. in diameter, the latter about 2.5 cm. broad, Russet-Vinaceous (pinkish brown), with distantly placed areoles filled with white wool and a few (usually 2 or 3) brownish, bristle-like spines, 1 to 5 mm. long, bearing no scales except in the very uppermost ones (at the base of the perianth). Outer perianth segments linear lanceolate, tinged green, 1 to 3 cm.

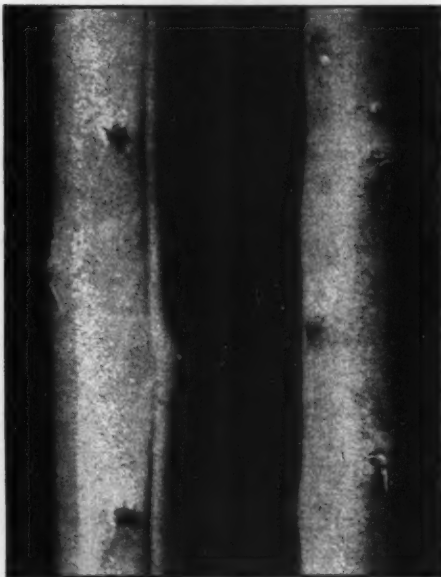


FIG. 19. Close-up of adult stem showing the distantly spaced areoles.

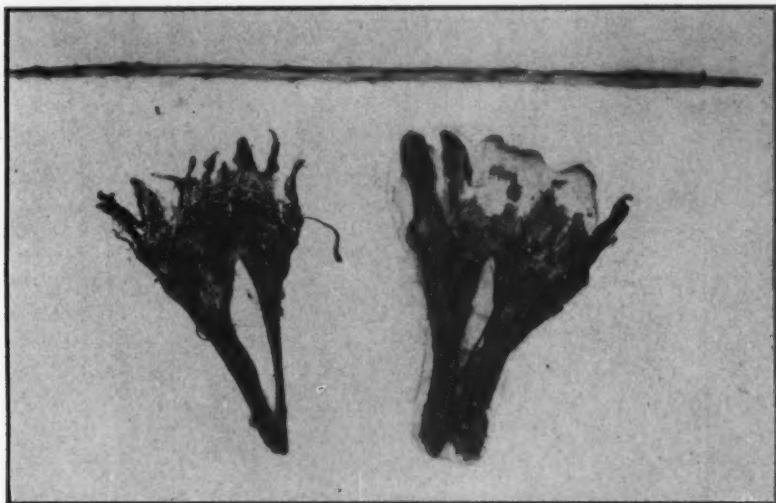


FIG. 20. Herbarium material of *Peniocereus Fosterianus*. Dried flowers and stems.

long. Inner perianth segments white, longer than the outer ones. Stamens numerous, attached at the upper end of the flower-tube or 3 cm. above the apex of the ovary and all along the wall of the throat, about 4.5 cm. long. Filaments white, anthers linear, Naples Yellow (pale yellow), 2 mm. long and about 1 mm. wide. Style slender, pale green, 7 to 8 cm. long. Stigma lobes 7, 4 to 5 mm. long. Ovary small, dark green, 1 to 1.5 cm. long, about 1 cm. wide, with closely set areoles filled with white wool and brown spines. Fruit not seen.

Type locality: Dense short growth of small shrubs, two miles south of Tierra Colorada, Guerrero, or approximately halfway between Chilpancingo and Acapulco on the Mexico City-Acapulco Highway.

Distribution: apparently limited in the immediate district where it grows in shrub thickets for its support. Type specimen deposited in the Herbarium, Missouri Botanical Garden, on sheet No. 1292521, obtained from M. B. Foster's garden in Orlando, Florida, from plant collected in Mexico in 1935. Living material is being cultivated in St. Louis, in Florida and in California.

Peniocereus Fosterianus Cutak, sp. nov.: Subdumosus at 21 dm. altus, ramos cylindricos elongatos graciles e trunco brevi tereti angulatove edens. Radicibus tuberosis globosis vel conico-globosis ad 10 cm. vel ultra crassis. Ramis adultis teretibus, gracilibus, glabris, totis pallide viridibus parte summa purpurascens, 1-10.5 dm. longis, 8-10 mm. crassis. Areolis minutis subnudis 1.5-2 cm. distantibus, aculeis 6 armatis; aculeis 2-3 superis radialibus cum aculeo singulo centrali bulbosis conicisve, atrobrunneis vel nigris, 1 mm. longis; 2 inferis acicularibus atrobun-

neis vel nigris, 2-3 mm. longis. Innovationibus obvie 3-5-angulatis, minute conferteque albidopunctatis, areolis approximatis 1-1.5 mm. distantibus, indumento lanoso albedo vestitis, aculeis 6-8 setosis patentibus albidis brunneisve. Innovationibus ex apice ramorum crescentibus primo angulato-alatis, mox teretibus. Floribus nocturnis, albis, 8.5-10 cm. longis, tubo fauceque roseobrunneis 5 cm. longis, areolis dissitis albolanosis, aculeis setosis brunneis paucis. Perianthii laciniis externis lineari-lanceolatis, viridibus, 1-3 cm. longis, internis longioribus albis. Stamina numerosa, 4.5 cm. longis, filamentis albis, antheris pallide luteis, stylo gracili, pallide viridi 7-8 cm. longo, stigmatis lobis 7, 4-5 mm. longis; ovario parvo, atroviridi, areolis confertis obsito lanosis aculeatisque, 1-1.5 cm. longo, ca. 1 cm. crasso. Fructu ignoto.

SEEDS WANTED

For several months I have tried to locate some place where *Ariocarpus fissuratus*, *Lemaireocereus marginatus* and *Lophophora williamsii* seed could be purchased, but without any luck. The numerous commercial dealers contacted do not stock same, so thought some society member might know where I could purchase the seed. Maybe some member has the seed I want and would be kind enough to sell me same. If they have the seed, but money don't interest them, maybe some of the rare imported cacti seed I have will, if so will be glad to trade seed. I wish to purchase 1000 seed of each kind, but will be glad to buy smaller amounts if party does not have that many. Please state kind, amount and price in first letter so as to save time, for I'm in a hurry to get seed. Will send list of imported cacti seed to anyone who does not care to sell wanted seed, but is interested in trading, so he can pick out kinds wanted in exchange.

RUFUS E. BLAIR.

BOOKS ON LOAN

Most of the books are available in Ohio from the state and city libraries. They may be obtained on inter-library loan through your local library. The only cost is a low rate of postage both ways. Perhaps other states have the same service.

MISS ROSEMARY YAGER, Ohio.

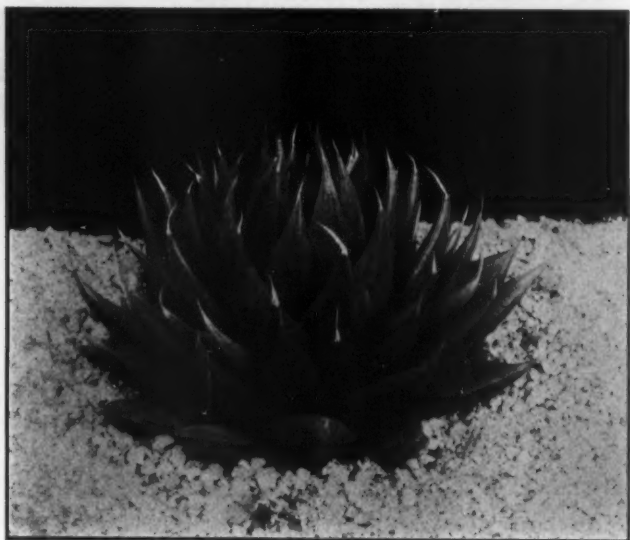


FIG. 21. *Haworthia aristata* Haw. nat. size.

Notes on Haworthias

By J. R. BROWN

Haworthia aristata Haw. Suppl. (1819) 51; Poelln. in Repert. Sp. Nov. XLIII (1938) 92, XLIV (1938) 220. *Haworthia unicolor* Poelln. in Kakteenkunde (1937) 154, photo 133. *Haworthia setata* var. *subinermis* Poelln. in Repert. Sp. Nov. XL (1936) 150.

Plant stemless, 4-7 cm. or more in diam. many leaved, simple or proliferous from the base in age.

Leaves pale to dark green without lighter markings, but with many inconspicuous darker lengthwise lines, 4-6 cm. long, 10-15 mm. broad, ovate-lanceolate, gradually or sometimes more abruptly acuminate, the younger leaves lightly incurved, face of leaves flattish to slightly convex with a slightly raised median line, back rounded and more or less obtusely and obliquely keeled, the upper margins and keel sometimes slightly pellucid, smooth or occasionally with inconspicuous teeth, the flexuose end-bristle 5-15 mm. long.

Type locality unknown. Introduced to Kew from South Africa about 1818.

In recent times it has been recorded from many localities, Montagu, Barrydale, Matjesfontein, Oudtshoorn, Gt. Brak River, and Ockerts Kraal in Ladismith Distr.

The name *Haworthia unicolor* was given to the pale green forms which were first seen, however it appears that this pale color is due to more shaded conditions and where more exposed, the plants assume a darker hue, some forms being very dark green in color. Later on it was realized that the plants agreed with Haworth's *Haworthia aristata*. It would seem that there is some variation in the plants from the different localities, in size, color, smoothness of the leaf margins and length of terminal awn.

To illustrate this *Haworthia*, 2 plants from Gt. Brak River have been used, one of which, grown under the protection of glass is pale green, the other, grown outdoors, is somewhat withdrawn into the soil, dark green in color, and with the leaf tips more withered.

The plants also illustrate very well how, under artificial conditions of culture, growth may be

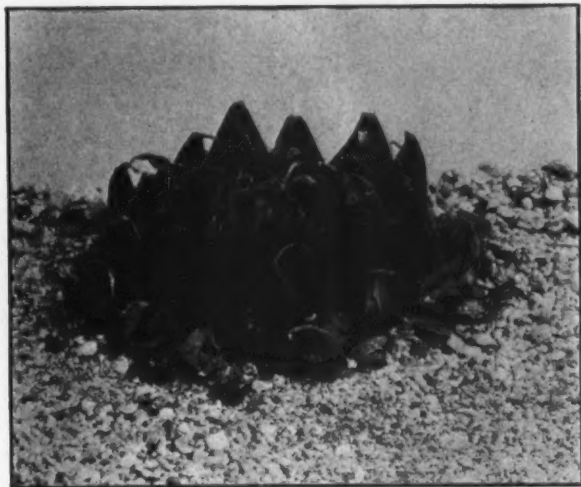


FIG. 22. *Haworthia aristata* Haw. nat. size.

more or less contiguous, while in the case of the plant growing outdoors, growth is dormant, many of the older leaves have dried up, thus

reducing the leaf surface, and the leaves are more incurved towards the centre, shading and protecting the growing point.

1945 ANNUAL MEETING OF THE SOCIETY

By WM. TAYLOR MARSHALL

The 1945 annual meeting of the Society was held at Gates Famous Cactus Garden near Corona, California, on Sunday, October 14. This was the first meeting since gas rationing was lifted and few of our members had visited the garden since the occasion of the 1942 annual meeting at which we dedicated the Lower California Botanical Garden which is located at the Gates garden.

The interim growth of the garden astonished and delighted us. Acres of succulents are grown here in just the same manner as are garden crops in California—half mile long rows separated by irrigation trenches. The plants respond to this treatment with sturdy and colorful growth. Scott Haselton, who spends most of his waking hours in the somewhat odorous confines of a publishing institution, became deeply interested in the odorous flowers of a mile of *Stapeliads*. Ed Gueguen, who is also making sturdy and colorful growth in California (Kansas City members please note size and color), was more interested in the rows of the larger growing *Cerei*.

The meeting was well attended and the picnic lunch large and tasty to meet the appetites of city dwellers breathing pure mountain air for a change. President Maybelle Place presided at the meeting and received the report of the nominating committee. The convention committee reported that first steps in preparation for the second convention to be held at Cincinnati in 1947 were well under way.

Certificates of Fellowship were presented to Boyd Sloane, J. R. Brown, H. E. Gates, and Ervin Strong and these gentlemen were duly thanked for their work for the advancement of interest in succulent plants.

At the time of the dedication of the Lower California Botanical Garden on October 4, 1942 (reported in *CACTUS JOURNAL* XIV:138, 1942) a picture (Fig. 23) was taken of the planting and from about the same location picture (Fig. 24) was taken on the day of this meeting. The growth of the plants in the intervening three years is astonishing. In the first picture can be seen a species of *Myrtillocactus* collected by Howard Gates near San Ignacio in 1933 when



FIG. 23. Howard Gates' garden in 1942.

I was with him. It can be seen in the left center just above the tip of the *Opuntia* in the left foreground. At that time the plant had been under cultivation in a pot for nine years but had produced only two small branches in that time. The same plant can be seen in picture (Fig. 24) directly in front of Howard Gates. Incidentally this plant should provide food for thought for arm chair botanists who want to make new

species of every spine variation, for the *Myrtillocactus* when collected was practically unarmed and appeared quite dissimilar to any known species. For this reason and because of the fact that it was found in association with a few other similar plants outside the normal range of *Myrtillocacti* we collected it for observation as a possible new species. Today it exactly resembles specimens of other *Myrtillocacti* from Lower



FIG. 24. Howard Gates and the same garden, as above, in 1945.



FIG. 25. Ye Editor tries to find two flowers alike in these half-mile rows of seedlings of *Stapelia hirsuta*.

California and when placed in the same environment is heavily armed.

Yucca valida Brand., the Joshua Tree of Lower California, is the three-branched plant in the central portion of photo (Fig. 24) and its earlier stage can be seen in photo (Fig. 23) partly concealed by a pad of a *platyopuntia*.

All of the cacti, trees, vines and shrubs in the Botanical Garden section of Gates gardens are

natives of Lower California. Mr. Gates confided to me that he has one great ambition, to make two more trips to Lower California to visit remote districts still unknown to him and to further amplify his notes and then a monograph on that most interesting peninsula. I sincerely hope that his ambition may be realized and he may be able to record the vast store of information he has acquired in ten expeditions.



FIG. 25. Assistant editor, Edwin Gueguen, in a plot of cacti that is cultivated like any other field crop.

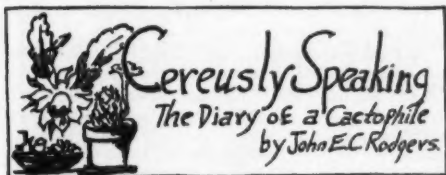
FELLOWSHIPS

The Cactus and Succulent Society of America was organized to further interest in succulent plants and for seventeen years has worked to this end. One method for the accomplishment of such a purpose is to encourage publications of scientific books and papers, popular books, pamphlets and magazine articles dealing with the subject and to suitably acknowledge outstanding labors tending to spread interest in cacti and the other succulents.

Fellowship in the Society is a very special form of membership which acknowledges the great usefulness of the contributions of the fellow in the popularization of succulent plants. To date the following have been awarded fellowships for the reasons stated after their names, and the eminence of these fellows in that portion of the botanical world most concerned with desert vegetation attests to the value of this signal honor:

PERMANENT FELLOWSHIPS

- BAILEY, L. H., Ithaca, N. Y.—Writings, especially the "Cyclopedia of Horticulture."
 BRAVO, HELIA H., Mexico City, Mexico—Author: "Las Cactaceas de Mexico," etc.
 BOCK, THOR METHVEN, Hollywood, Calif.—Co-author "The Cactaceae."
 BAXTER, EDGAR, Ione, Calif.—Author: "California Cactus," ex-President.
 BROWN, J. R., Pasadena, Calif.—Co-author "Succulents for the Amateur," Journal writer.
 BENSON, DR. LYMAN, Claremont, Calif.—Author: "Cacti of Arizona," and other papers on desert plants.
 CASTELLANOS, DR. A., Buenos Aires, Argen.—Writings and Taxonomic work.
 CRAIG, DR. R. T., Baldwin Park, Calif.—Explorer, Author: "Mammillaria Handbook."
 CUTAK, LADISLAUS, Missouri Botanical Garden—Writer and Explorer.
 CARISS, DR. FRANK, La Canada, Calif.—Friend and Benefactor of the Society.
 CLOVER, DR. ELZADA, Michigan University—Writer, Explorer and friend of the Society.
 DYER, DR. R. ALLEN, Pretoria, S. Africa—Co-author: "Succulent Euphorbieae."
 GATES, HOWARD E., Corona, Calif.—Past President, extensive explorer and prolific writer.
 VERA HIGGINS, M.A., London, England—Author of "Study of Cacti," etc.
 HOSSEUS, DR. C. C., Cordova, Argentina—Author: "Notas Sobre Cactaceas Argentinas."
 HASELTON, SCOTT E., Pasadena, Calif.—Editor: "Cactus and Succulent Journal."
 HERTRICH, WM., Huntington Botanical Gardens—Writer and good friend of the Society.
 HIGGINS, ETHEL BAILEY, San Antonio, Texas—Author: "Our Native Cacti."
 LEON, HERMANO, Habana, Cuba—Author: "The Genus Melocactus en Cuba," etc.
 MARSHALL, W. TAYLOR, Los Angeles, Calif.—Writings and Explorations.
 MOORE, DR. GEORGE, Missouri Botanical Garden—Active interest in Convention.
 MORRISON, B. Y., Washington, D.C.—Editor National Horticultural Magazine.
 OCHOTERENA, DR. ISAAC, Mexico City, Mexico—Author: "Las Cactaceas de Mexico."
 PRAEGER, DR. R. LLOYD, England—Articles "Genus Sedum and Sempervivums," both in Journal of The Royal Hort. Soc. 1921, 1932.
 QUILLIN, ELLEN SCHULTZ, San Antonio, Texas—Author: "Cactus Culture" and co-author "Texas Cacti."
 REYNOLDS, G. W., Johannesburg, So. Africa—Co-author: "Succulents for the Amateur."
 RUNYON, ROBERT, Brownsville, Texas—Co-author: "Texas Cacti," Explorer, Extensive writer.
 STANDLEY, DR. PAUL, Chicago, Ill.—Author: "Trees and Shrubs of Mexico," etc.
 SHREVE, DR. FOREST, Carnegie Institute—Explorer and writer.
 SLOANE, BOYD, Pasadena, Calif.—Co-author: "The Stapelieae," "The Succulent Euphorbieae."
 SHURLEY, E., London, England—Writer and collaborator with Dr. Craig on "The Mammillaria Handbook."
 STRONG, ERVIN, La Habra, Calif.—Ex-president, and promoter of first Convention.
 WHITE, ALAIN, Massachusetts—Co-author: "The Stapelieae," "The Succulent Euphorbieae."
 WIGGINS, DR. IRA, Stanford University—Explorer, writer and good friend of the Society.
 WALTHER, ERIC, Golden Gate Park—Writer and specialist in Echeverioidea.
 WHITEHEAD, JACK, University of California—Explorer and Student.



February 1. Checked my 20 species of the genus *Kalanchoe* of the family *Crassulaceae*, or *Orpine* family. This genus and *Bryophyllum* are two of the easiest types of plants to grow in my greenhouse. *Bryophyllum Daigremontianum* budded. Starved it into a lilliputian size suitable for pot culture—16 inches high. Kept it on the dry side. One of my favorites when it is in bloom. Five heads of *B. Fedtschenkoi* have dropped a tassel of buds from the exquisite dusty-purple-blue leaves. Most of the *Bryophyllums* are leggy when kept dry but the colors are "out of this world." *B. pinnatum* (*calycium*), that globe-trotter of the clan, has just attained its adult stature—three feet, and shows signs of buds. Saw the leaves in cellophane envelopes in our 5 & 10's labelled "air-plan, pin to curtain and see it sprout new plants."

February 3. *Kalanchoe beharensis* (wrongly called *Kitchingia mandrakensis*) now $2\frac{1}{2}$ feet tall. Only 18 feet to go until it's an adult. No wonder yours truly has kept it on the dry side in a $3\frac{1}{2}$ inch pot. Loses its leaves. Only 5 pairs at present but books say seldom under most satisfactory growing conditions does it have more than 6 or 8 pairs at one time. Doctor James F. Machwart, Parma, Ohio, has the largest I've seen—4 feet and branched with foot-long leaves—10 inches wide at the base. Keeps it moist. Has 15x22 greenhouse. Uses rich soil and a large "palm pot." *Kalanchoe tomentosa* (panda plant) thriving in a 4 inch pot of rich soil ($\frac{2}{3}$ leam mold and $\frac{1}{3}$ sand, with a dash of lime). Has two branches. Brown to black serrations on felted leaves gives the plant its public appeal. Remains small which recommends it to the window gardener. Likes to be kept moist but never soggy-wet. Keeps mature leaves if not too dry. Grows readily from mature leaves inserted in "cutting" sand. *B. scandens*, a vining type, has dropped plantlets from the leaf-ends into several nearby pots until I now have 8 three foot branched plants. No "mouse-colored" flowers as yet but I'm a patient fellow and can wait its time.

February 10. Examined *Kalanchoe synsepala* for runners (see "Succulents for the Amateur," page 109). One of the prettiest as it grows more like a rosette. Got a cutting from Doctor Henry Shetrone, Columbus, Ohio. Has 4 soft reddish spine-like projections at tip. Thrives in a small pot. Runners take root in nearby soil. *K. marmorata*, a dime store favorite, is often neglected but deserves more popularity. Has reddish brown to purple markings on under side and upper side of older leaves. New leaves are a blue-green covered with a gray "bloom." Foliage plant for me only. *K. rotundifolia*, another gift from Dr. Shetrone, is a beauty with "bloom" over its rounded leaves like *B. Fedtschenkoi*. No serrations, however. Likes a rich soil with plenty of well-decayed humus and coarse sand for drainage. Likes frequent manure-water feedings. Keeps color even when well watered.

February 14. Valentine day. Gave the "better-half" a corsage of *B. Daigremontianum* and *B. Fedtschenkoi* blooms backed with orange-tinged *K. longiflora* tips against a *K. beharensis* leaf. Stunning and not at all hard to do. Lavender, coral and new blue ribbon completed the picture. Both of these flowers make good

bouquet material. Last a week or more if kept away from direct heat.

February 17. *K. laciniata*, that marvel of lacy symmetry, has three heads. Another globe-trotter as it has crossed the Atlantic and is acclimated in South America. If kept on the dry side the reddish purples and maroons predominate. Gets leggy. To most collectors this seems a major calamity, but I remember I've lost most of my boyish looks too, and so enjoy my leggy succulents. *K. kewensis* with leaves similar to *B. scandens* (in shape and color while young). Shrubby, not a vine. Dr. Shetrone traded it as a greenhouse question-mark along with *Crassula deltoidea*. Grows for me. Light is good but not direct sunlight. *K. Blossfeldiana*, a winter stand-by in the florist trade a few years ago is a mass of red upright bell-shaped flowers. Pretty but not always dependable (I must confess, however, it is a luxuriant yearly joy in the window garden of an "un-cactophilic" friend, Mrs. Marie Loomis.

February 20. *Bryophyllum crenatum*, a square-stemmed red-purple serrated-leaved plant growing well. Quite dry. Stunning when used with *K. longiflora* (misnamed *somaliensis*) which turns orangy-gold when dry. *K. thyrsiflora*, the "dusty-miller loose-powder plant," goes so far as to catch water when kept dry in its chalice formed by its leaves, and water rolls around in the loose "dust." One of the beauties in my collection thanks to Dr. Shetrone.

February 23. *K. orygalis*, a brown felted plant, has leaves 4 to 5 inches long. Spade shaped (see page 109 "Succulents for the Amateur"). Another *K. beharensis* for "nudity." Both plants like plenty of root room and are gross feeders. *K. sexangularis* (looks round to me, unless flowers are six-angled) growing into a shrub. Smooth lettuce-green, glossy leaves in alternate pairs same as *K. orygalis* and *beharensis*. Branches freely. Leaf cuttings send up many small plants with brown, slightly felted leaves which become like parent later. Both have heavy dry manure feedings worked into top of soil in pots.

February 26. Worked over an hour with tweezers and fingers to get *B. tubiflorum* and Houghton's hybrid plantlets out of pot within radius of three feet of 8 foot parent plants I've nurtured. Pinched out tops and vowed there'll be more. May bloom. I can't throw the old plants away. Oh well, I'm nuts about all of these "meek that inherit the earth" succulents.

February 28. *K. Welwitschi* budded. One of the breath-taking combinations. Plum-colored stems with a soft-blue bloom on leaves and burnt orange flowers. I developed a steel-blue with blue bloom as a seedling from the above with yellow flowers which is a picture. Flowers while small. 6 to 8 inch stem to bloom stalk. Good cut-flowers for house and corsage material (I've found).

So endeth the Rodger's notes on *Bryophyllum* and *Kalanchoe*. Next month I shall discuss some other genera from the *Crassulaceae*.

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ENGLAND REPRESENTATIVE

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AFFILIATE NOTES

Address your Affiliate Notes to Chas. Place, 5048 Hook Tree Rd., Rt. 1, Box 388 T, La Cañada, Calif.

It is with great pleasure that I start my new term as Corresponding Secretary, by welcoming a new Affiliate, the Epiphyllum Society of America. This Society was founded for the purpose of research on what is perhaps the most popular and grateful group in the cactus field.

Cheers and Salutations to the Epiphyllum Society of America.

Mrs. M. F. Maxwell (Pub. Chairman) writes:

"The Epiphyllum Society of America held its first open meeting on the 25th of October in the Los Angeles Public Library. Mrs. Cactus Pete, the Vice-President, presiding. An attendance of nearly one hundred and fifty people prove the ever increasing popularity and interest shown in these plants. Their easy culture and abundance of bloom, make them one of the favorites of the Cactaceae. The speaker of the evening was Mrs. Maybelle Place, her subject being, 'The True Epiphyllum Species.' After many years of study and research, Mrs. Place has succeeded in completing her collection, with one exception, of all of the species listed by Britton and Rose who are authorities on this subject. Mrs. Place used many living plants and some very fine slides, made and shown by Ted Taylor, to highlight her talk. Date for the next meeting was set for the first week in January, at which time officers for the new year were elected. A great deal of interest is being shown in this group now, so look for exciting things to happen in the year to come. Much research both in culture and background will develop."

May the life of your Society be as harmonious as the colors in the flowers you represent.

C. L. Wiese, writes:

"The Cactus and Succulent Society of Oklahoma met at the home of Charles and Mary Polaski, where forty members, prospective members and friends made merry. Exuberance and gaiety marked the festivities. Dignitaries attending were our Mexican Consul, Eugenio Aza, wife, with son and secretary. The decorations were original and superb. A *Rhipsalis* was trimmed and adorned for the Christmas tree, the 'Old Man' *Senilis* in front of a mantel mirror donned in a cowboy hat, with a sun-burned nose and chin and an Uncle Sam's beard. J. B. Lankford entertained with a magician's act. Our host presented each member with a handsome Grusonii, offering a prize for the best year's growth."

Have just heard that Mrs. John B. Lankford has been elected to the Presidency of the Cactus and Succulent Society of Oklahoma. Very best to you and your Society, Mrs. Lankford.

Mrs. Margaret Radden (Pres.) writes:

"The Beverly Hills Cactus Club of Chicago had their Xmas party in the home of Mrs. Radden, December 5th, a grab bag and a snow-ball game were a lot of fun. Our Xmas gifts were *Cephalocereus senilis*, and *Mammillaria plumosa*. The following are the new officers for 1946: Mrs. Radden, President; Mrs. H. B. Relth, Vice-President; Mrs. E. T. Berry, Recording Secretary; Mrs. Chas. Schultz, Corresponding Secretary and Treasurer. The Chicago Cactus Club had their Xmas party at the home of Mrs. Radden, December 2. Mrs. Harry N. Osgood, a very fine photographer, has traveled in many states to take these gorgeous pictures of cacti, flowers, gardens, etc., which she so generously showed on her own screen, also our convention pictures. Our Xmas gifts were *Cephalo-*

cerus senilis, *Mammillaria hahniana* and *Cephalocereus chrysacanthus*."

Cephalocereus senilis, "Old Man" with the white whiskers, what could be more appropriate for Xmas.

Muriel Merrell (Pub. Chairman) writes:

"The Southern California Cactus Exchange is pleased to announce the unanimous election of the following officers for 1946: President, Elsa W. Mark; Vice-President, Mrs. Harry K. Grimes; Secretary, William O. Bright; Treasurer, Frank R. Mark; Trustee, Jack Ginter (term of 3 years). Chairmen of the Standing Committees were appointed by President Elsa W. Mark at the December meeting. Program, Mrs. O. H. Janzow; Publicity-Editor, Muriel Merrell; Reception, Mrs. S. A. Flickinger; Library, Mrs. Martha Maxwell. A newly adopted 4-point program will get under way at our first meeting of the year, with an Epiphyllum Division, headed by Judith Packard, a Cactus and Succulent Division, headed by Homer G. Rush, a Flower Arrangement Division, headed by Mrs. May McClure, and a Question and Answer Division, headed by Martha Maxwell. Meetings will continue to be held the third Sunday in each month."

Success to the new officers and their Club.

Ethel Rush (Publicity Chairman) writes:

"The Los Angeles Cactus and Succulent Society held their January meeting the 6th, at the home of Mr. W. T. Marshall. The members present showed great interest in the study work in Botany which is being presented and all members took part in lesson No. 2, which was given by Mr. Marshall. Following this a very fine discussion of the difference between the genus *Mammillaria* and the genus *Coryphantha* was held and Mr. Marshall explained the main points of difference and demonstrated his points with plants or parts of plants. The subject for discussion at the next meeting will be Crests or Fasciations, their possible causes and the methods of growing them."

The subject of crests or fasciations will be fascinating.

Cactus Digest of the Henry Shaw Cactus Society, Ladislaus Cutak, Editor:

"This month, as everyone knows, we do not have much of a meeting, as we have our annual Christmas Party and Installation of Officers . . . Each member of the Society received a seedling *Opuntia mamillata*, done up in an individual cellophane bag and stapled shut, the staple being hidden by a little silver bow (again by Dolly Fruehauf). Each of the retiring officers and each of the new ones received, in the case of the ladies, a lovely corsage of succulents tied with brilliant red ribbon, and the men, the nicest boutonniere of *Kalanchoe tomentosa*, the stem wrapped in silver paper . . . As you all know, we have a monthly 'show' at which each member is requested to bring in his prized specimen of whatever species the Program Director has designated for that meeting (an *Opuntia*, *Euphorbia*, *Living Rock*, or what have you), and the winning member gets three points, the next two, and the third prize merits one point. Now at the end of the year these winnings are all totaled up and the 'Big Winner' gets a prize. This year the winner was Mr. Bill Bruce—it was a great big Christmas Cactus."

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SPINE CHATS

LADISLAUS CUTAK



This month I'd like to pay tribute to a very courageous lady who has to conduct her business from a wheel-chair. I know that she wouldn't want me to divulge all the knowledge I know about her, for fear that some of our readers might think that she is looking for sympathy. On the contrary, this sweet lady is always cheerful, with never a word of complaint, and despite her physical handicaps is more capable at present than some of us more fortunate ones. She and her husband have always had a commercial garden, specializing in roses and general line of cacti and succulents. In late years, her health failed and gradually through arthritis, she became so crippled it necessitated the use of a wheel-chair in order to get around. But this was not all Fate had in store for her. Little by little, her eyes gave out and now she is totally blind. Did this dampen her interest in her hobby? Not in the least.

Her passion for Epiphyllum hybrids is intense and since her knowledge of the plants was derived before her sight failed her, she does not consider her condition such a calamity. During the past year she was awarded a life membership to the CACTUS JOURNAL for the most workable classification of Epiphyllum hybrids thus far devised. Her love for plants was undoubtedly inherited from her father, Mr. J. B. Wagner, the rhubarb and berry specialist who operated a nursery in Pasadena for many years. He was a great friend of Luther Burbank, Albert Etter, John Lewis Childs and David Fairchild. From 1908 and on she handled much of his office work and thus could not help but develop a keen interest and appreciation for plants. Mr. Wagner often traveled throughout the United States and would send home queer plants and seeds for his family to try, always just hoping for something worthwhile to turn up. He did introduce a Giant Black Walnut Tree, which, at the time was described as the strongest growing hardwood tree in existence. He also developed the Wagner Giant Winter Rhubarb. At one time, when Opuntias were highly advertised as stock feed, he was shipping Prickly Pear Cactus by the carload to Texas and Arizona for that purpose.

Perhaps by now you may have guessed this lady's identity. If not, it is my pleasure to introduce her to you. She is none other than Mrs. Gertrude W. Beahm of the well-known Beahm Gardens in Pasadena, and one of the original members of the Cactus and Succulent Society of America, having joined when that club was first organized in 1929. Now, because of her physical handicaps, her business is gradually being taken over by her husband, Mr. Sherman E. Beahm, who specializes in tree roses on the wholesale scale, and in Gerberas or African Daisy. Mr. Beahm is also a great Kodachrome fan and during the past year has taken close to 1000 shots of Epiphyllum hybrids for his ardent spouse. My hat goes off to Mrs. Gertrude Beahm, who is fair and square in her dealing with all her customers and therefore loved by all our members. As if she has not enough on her hands already, she was appointed Editor for the Epiphyllum Society of America, recently reorganized and now gaining prominence.

It is my duty to report here the death of Lady Thiselton-Dyer, who died at Weir Quay, Devonshire, England, on December 16, last, in her ninety-first year. Were it not for this grand old lady the fine Curtis' Botanical Magazine might have ceased publication with the sudden withdrawal of its staff artist. Walter Fitch, the botanical artist, began a series of beautiful drawings in 1834 and continued for many years until one day he had a dispute with Sir Joseph D. Hooker, editor of the periodical and left suddenly, leaving behind only a few completed drawings to insure the magazine's existence. It was then that Lady Thiselton-Dyer stepped into the picture and saved the situation for her editor-father by condescending to do the illustrations for the magazine. Early in life she had shown artistic ability and for a time was tutored by Mr. Fitch himself, so she was capable of stepping right into his shoes. In all she made about 90 plates, her first being that of *Hoodia Bainii*, appearing in 1878. Born Harriet Ann Hooker on June 23, 1854, she was the eldest daughter of Sir Joseph D. Hooker, distinguished botanist and Director of the Royal Botanic Gardens, Kew, for twenty years. On her twenty-third birthday she was married to W. T. Thiselton-Dyer, who succeeded his father-in-law as Director of Kew in 1885. He did much to improve the Gardens during his 20-year regime, one of his more important acts being the rebuilding of the Succulent House. He also edited the Flora of Tropical Africa and the Flora Capensis, in which appeared Dr. N. E. Brown's revision of the *Stapelieae*.

The possibility of using several species of *Sansevieria* as a source of hard fiber suitable for cordage and bag manufacture has been recognized for many years, but the fiber has never attained commercial importance due to several technical problems involved. However, as a result of the increased war-related demand for all types of vegetable fibers and the growing concern of some governments for the development of their natural resources, renewed efforts have been made to solve the technical problems of *Sansevieria* fiber production. Investigations were conducted at the Cuban Agricultural Experiment Station on three species to determine the comparative fiber content and the relationship of fiber content to length and age of the leaves. It was estimated that 3,210 pounds of dry, clean fiber could be produced per acre from a 7 to 8 year old planting of *S. guineensis*, but on a commercial basis, perhaps only half of this could be produced annually at the end of the 4th or 5th year. For further details I refer you to the Journal of the American Society of Agronomy (37:953-961, November, 1945) where an article on this subject appears, under the authorship of Julian C. Crane and Raul E. Alonso.

Dr. Charles E. Bessey once reported that he had the stamens in one *Carnegiea gigantea* flower counted and found that there were 3,482, while the ovary contained 1,980 ovules.

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